Protective Tree Measures:

All native oak trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

- A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.
- 2. Temporary orange construction fencing or a similar protective barrier shall be installed one foot outside the driplines of the oak trees prior to initiating project construction, in order to avoid damage to the trees and their root system.
- 3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the oak trees.
- 4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of the oak trees.
- Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the
 driplines of the oak trees. Where this is necessary, an ISA Certified Arborist will provide
 specifications for this work, including methods for root pruning, backfill specifications and
 irrigation management guidelines.
- 6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of oak trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.
- 7. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of the oak trees.
- 8. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.
- 9. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".
- 10. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.
- 11. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.
- 12. In the instance where temporary equipment or vehicle access over the dripline is necessary, install 4-inches of new mulch and cover the mulch with metal plates or 3/4 inch plywood.